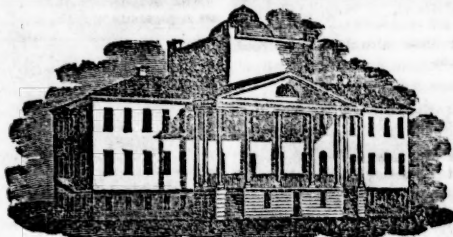


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I.

*A Dissertation on the Disease called an Irritable State of the Urinary Bladder ; its Causes and Treatment.**

By USHER PARSONS, M.D.

IN composing a dissertation on a subject proposed in few words, expressed in a general and indefinite manner, and where, as in the present case, circumstances preclude the privilege of knowing the purposes and wishes of those who propose it, and who are to decide on its merits, a great difficulty is experienced, in settling on the limits of the work, as well as in selecting the materials that are to compose it. This difficulty is increased in the present case, by want of information respecting the exact meaning intended to be attached to the term Irritable State of the Urinary Bladder. I find no disease bearing this name in any system of nosology, ancient or modern, and with

the exception of what is contained in some comparatively recent treatises by Rollo, Wilson, Foote and Bingham, where the symptoms of irritable bladder are made a subject of separate investigation, I am ignorant of any authority we possess for conferring on this term the dignity and privileges of a separate place in nosological arrangement ; or of any important advantages gained by considering all cases of an irritable state of the bladder under one general head, in preference to regarding it, as in point of fact it in most cases is, merely a symptom of disease previously existing in some other organ, to the cure of which our attention should be chiefly directed, rather than to any primary affection of the bladder. It is true the bladder may be affected with an idiopathic irritability, or with inflammation requiring our undivided attention to the organ itself, as much so as the stomach, or the head, and we have terms expressive of inflammation of these organs, in Cystitis, Phrenitis

* This Dissertation received the Boylston Premium for the present year.

and Gastritis ; and perhaps an idiopathic, excitable or irritable state of either of the organs mentioned, is worthy of a name and place in the catalogue with other diseases ; but since it has been withheld from such affections of the stomach and head, I see no good reason for showing such partiality to the bladder. But admitting the term to be correctly and advantageously employed in respect to idiopathic irritability of the bladder, inasmuch as it expresses our meaning more definitely than the term *Incontinence* of urine, employed prior to the time of Sauvages, and *Eneuresis*, used since his day, which include two nearly opposite diseases, a morbidly excitable and a paralyzed bladder, there still remain objections to using the term irritable state of the bladder when the affection depends altogether on diseases in other organs. We have no treatises on an irritable state of the stomach, intended to include that which exists in pregnancy, or from inflamed kidney, or strangulated hernia, and why then employ irritable state of the bladder to express that which results from disease of the kidneys, or of the prostate gland, when this irritability is merely sympathetic,—is reckoned too among the symptoms of such primary affection, and requires but little attention in the course of treatment. It would accord better then with these reflections, and be in strict conformity with the state of the question here proposed, to limit our investigations to the cause and treatment of an irritable state of the urinary bladder of the idiopathic or local kind. An objection, however, immediately presents itself to this course, in the paucity

of materials of any interest that can be drawn together for a dissertation, and this consideration, together with the difficulty in some cases of drawing a line of distinction between idiopathic and sympathetic irritability, and the fact that Howship, Foote, Bingham and others, have included under this head, almost every variety of irritable bladder, from whatever cause, induces me to adopt the same course, premising, however, that the nosological term most applicable, as covering more of the ground occupied by this dissertation than any other, is *Eneuresis Irritata*.

The attention will first be drawn to the structure, properties and functions of the organ. The bladder is a species of musculo-membranous sac, situated without the peritoneum at the anterior and middle part of the cavity of the pelvis,—behind the pubis,—before the rectum in man, and the uterus in woman,—below the mass of intestines, and above the lower part of the rectum. The sac presents different regions, the superior of which is called the fundus of the bladder; the middle part, which is a little larger, is called the body of this organ; the lower part, still larger, is called the lower fundus, and extends backwards; and, lastly, the fourth region, or neck of the bladder, which stretches forward.

Of the two surfaces which the bladder presents, the internal is most worthy of examination. There are to be seen, 1st, wrinkles running in various directions, and more or less multiplied according to the state of contractedness of the organ;—2d, a velvet-like surface, resembling what

is seen in the stomach and intestines ;—3d, sometimes eminences formed by the prominency of some of the fibres of the mucous coat, between which there are depressions, where are sometimes found calculous secretions, and hence they have been termed stony cysts ;—4th, three openings, one in front, which leads through the urethra ; the two others, situated posteriorly, constituting the entrance of the ureters. These three openings form the angles of a triangular surface, called by the French *trigone vesical*, which is without membranous wrinkles, and is endowed with extreme sensibility, as is evinced by the acute pains felt when a calculus or stone comes into contact with it. The whole of the surface near the neck of the bladder, is, however, possessed of greater sensibility than the superior fundus.

The peritoneum covers its superior, posterior, and lateral portions, and being reflected off to the walls of the pelvis, leaves uncovered the front, the lower, and a small portion of the back part. It is by these uncovered regions we are able to perforate the bladder without penetrating the cavity of the abdomen. It is by a lax cellular structure that this membrane adheres to the subjacent or muscular coat, and this cellular tunic covers the whole bladder, and by some anatomists has been enumerated as one of its coats. The muscular membrane, destined to contract and sustain the bladder, is situated within the peritoneal coat, and extends over the whole organ,—is of unequal thickness in different portions of its extent,—is very thin in front, behind and on the sides,—is more developed towards the neck, and es-

pecially between the vesiculæ seminales. Its fibres are whitish, flattened, and run in various directions, sometimes interlacing and combining, constituting fleshy columns. Low down in the fore part of the bladder, the muscular fibres collect into a sort of tendon, which stretches off to the pubis, and this in the contractions of the organ causes it to be drawn forward towards the back of the bone. A few fibres extend to the dense, white, elastic substance, constituting the chief thickness of the neck of the bladder, and which is not covered by a particular muscle of the sphincter kind, as some anatomists have maintained.*

The inner coat is called the mucous, between which and the muscular coat, there is a white dense coat, very elastic, formed of cellular structure, but destitute of fat. It is penetrated by numerous bloodvessels and nerves, which intimately connect the mucous membrane with the muscular fibres. In this structure are situated the mucous glands, whose

* Mr. Bell says, "the true sphincter of the neck of the bladder has hitherto escaped notice ; it has been looked for on the outside of the prostate gland, and then the compressor prostaticæ, the levator urethræ and the levator ani have been considered as sphincters, and so indeed they are, inasmuch as during their action the urine cannot be expelled along the urethra ; but the true and appropriate sphincter of the bladder lies under the base of the prostate gland, and immediately surrounding the beginning of the urethra." In another place, vol. 1, p. 231, he says, "the sphincter vesicæ is not easily distinguished from the detrusor urinæ, being the fibres of it, only thicker and stronger at the lower and narrower part of the bladder." It is the opinion of French anatomists generally, that there is no such muscle as the sphincter vesicæ, though they admit that the levators of the urethra and anus perform the office of a sphincter, aided by the natural contractility of the urethra.

secretory ducts perforate and open on the inner surface of the mucous membrane. It is from this texture, more compact than the rest of the cellular system generally, that the mucous membrane derives its support. It is called by some the cellular coat, by others the submucous.

The mucous coat, named from the fluid spread over its surface, lines the urinary channels throughout their whole extent, from the glans penis, through the urethra, the bladder, ureters, the pelvis of the kidneys, the infundibuli, the papillæ and the capillary tubes which open on their summit. In the ordinary contractions of the bladder this membrane undergoes but a slight diminution of surface; it contracts scarcely at all, but folds within. Its inner surface is in contact with bodies heterogeneous to the living structure, and hence may be regarded as the limit and barrier placed between it and the bodies that are foreign to it; defending it from the injurious impression of these bodies, as the skin does the surface of the body, and experiencing no other change in itself, than an increase of secretion which is in no degree dangerous. The inner surface is covered with numerous papillæ, too small to be seen by the naked eye. Contiguous to its outer surface are the innumerable small glands above mentioned, imperceptible in their natural state, but which become visible when this tunic is affected with catarrh, and which filtrate the mucous liquor destined to protect the bladder from a too strong impression from the urine. Every considerable excitement of the mucous surface produces a remarkable increase of action of its secretory

glands, not by coming in contact with the glands, for these are always under the membrane, and consequently separated by it from irritating bodies, but by irritating the extremity of the excretory ducts. Mr. C. Bell denies the existence of the mucous glands, and says that the mucus is probably a general discharge from the surface. Bichat, on the contrary, remarks, that though it is true they are less apparent in the bladder than in the œsophagus and intestines, yet the mucus that moistens them clearly demonstrates their existence, for the identity of secreted fluids supposes, in fact, identity of the secreting organs. It appears that when these glands are hidden from our view, nature compensates for their delicacy, by their number.

The blood of the bladder comes in tortuous vessels and without uniformity from the hypogastric, umbilical, ischiatic, and middle hæmorrhoidal arteries, the largest of which are seen about the neck of the organ. Its veins are large and more numerous, and return the blood into the hypogastric plexus. The lymphatics are numerous, and lead to the hypogastric glands. The nerves come from the hypogastric and sciatic plexuses, which are made up from the cerebral and ganglionic systems, the latter of which predominate.

In respect to its properties, the mucous coat of the bladder possesses *animal sensibility*, which exists however in relation to the contact of substances to which it is not accustomed, as foreign bodies introduced into the organ, and stone, gravel, acrid urine, or other irritating substances formed

within the body. Inflammation, however, raises its sensibility, and renders the contact even of healthy urine both sensible and painful, and this too, whether the inflammation be of local or of sympathetic origin. Its *organic sensibility* is strongly marked, and is the spring to most of its actions, both in health and disease. It possesses an *animal* or voluntary *contractility* and very little *organic contractility*, as is evident from the wrinkles it exhibits, when suddenly emptied. Its sympathies are numerous and extensive, and may with propriety be divided, according to the plan of Mr. Hunter, into continuous, contiguous, and remote. It sympathizes more readily with organs that are lined by a continuity of its texture, as the kidneys, ureters and urethra; in diseases of neighboring organs it also often participates, and it holds an intimate reciprocal influence with the skin.

Among the most remarkable properties of the muscular coat, are, its sudden and extensive *extensibility* and *contractility*. Artificially distended, the bladder becomes immediately of a size treble that which is natural and ordinary. If it sometimes resists, it is no proof of its wanting extensibility; it is because the fluid injected irritates it and makes it contract. To use the words of Bichat, "the organic contractility in exercise in this case, prevents the development of extensibility, but when urine distends the bladder from suppression, we see it rise from its contracted and concealed state behind the pubis, sometimes even above the umbilicus,—on the other hand its contractility will, in an instant, compress the full distended bladder

to the smallest size. This contractility resides in its muscular coat. To this coat, which is destitute of an antagonist muscle, is opposed the urine, which collects and distends it till its quantity or quality stimulates the organ into action. There are, according to Bichat, three kinds of contractility concerned in the motions of the bladder:—1. Animal; 2. Organic; 3. Textural. The first resides chiefly in the voluntary muscles, the diaphragm and those surrounding the abdomen, and perhaps in some degree the bladder itself; for, though the organ is not classed among those of animal life, and submitted to the will, yet it is more allied to them in this respect than the heart and stomach; "for," says Bichat, "we know that falls on the sacrum, from which arise a shock of the inferior part of the spinal marrow, produce retention of urine,—that they strike as it were this organ with the same paralysis as the inferior extremities, which then also cease to move. Yet as the bladder is very powerfully assisted in its functions by the abdominal muscles which surround it, the immobility of these muscles contributes much to the inability to evacuate the urine." It is, however, the second kind, or organic contractility, that predominates in the contractions of the bladder, which derives its influence from the nerves of organic life, from the ganglions of the great sympathetic. The third kind, or *contractility of texture*, or tonic, which prevails alike in the organs of both animal and organic life, has little or no agency in expelling the urine, but after the other two contractile powers have expelled it, the contractility of texture closes the organ. The

urine then is retained in, or expelled from the bladder, in the following manner: gradually collecting, it distends the organ without exciting into action the sensible organic contractility; the muscular coat yielding to the urine in this case as a set of voluntary muscles does while its antagonist ones are in action, until the urine has, by its increased quantity, become an irritant sufficiently powerful to excite the organic contractility. The strength of this alone, is, however, unable ordinarily to overcome the resistance of the neck of the bladder, which is closed by the contractility of texture, and must be overcome by some force communicated to the urine. To accomplish this, there is a slight voluntary effort made by the diaphragm and abdominal muscles, sufficient to force open the neck of the bladder; after which, there is no need of continuing the effort, the organ itself being able to finish the expulsion. When, however, the urine is in great quantity, and has by long retention acquired the deep color which indicates a concentration of its principles, then the irritation it produces on the bladder, brings powerfully into action the sensible organic contractility, and the contents are expelled, voluntary efforts to the contrary notwithstanding.

It is to be observed, however, that the action is not immediate. There is, between the stimulus and muscular coat, something intermediate; the mucous surface, which feels the irritation, and its impression is extended to the muscular coat, through the intervening cellular texture. When the mucous coat that receives the impression is diseased, the contrac-

tility is uniformly altered; the same stimulus produces slow or quick contractions, according as the affection diminishes or raises the sensibility of this intermediate organ; even slight inflammation may produce very frequent discharges of urine.*

A desire to void urine varies in its frequency, from a variety of circumstances, some of which refer to the state of the organ, others to the nature and qualities of the urine. Among those of the former may be mentioned age, sex, temperament and habit. In infancy, the muscular coat responds with great quickness to the stimulus of the urine. Children often discharge it in sleep,—this susceptibility of the organ is, however, gradually diminished by age and growth, and in old age there is a defect of an opposite character,—a want of excitability in the organ, and a consequent retention. In females, the irritability of the organ is ordinarily greater than in males. An irritable temperament has some influence on the organ, and season still more. All vesical diseases vary, in summer and winter, and are always exasperated by easterly winds. Habit, too, is worthy of attention, as will hereafter be shown. The inflammation of the organ has already been adverted to.

In regard to the nature of the

* The muscular coat of the bladder possesses very little animal sensibility. "Remove," says Bichat, "the peritoneum behind the bladder of a living dog, and irritate the subjacent layer, the animal gives but few marks of pain." He mentions an uneasiness, or feeling of slight distress, experienced by persons whose bladder is kept permanently empty, as by an open sound in the urethra, which transmits urine as fast as it oozes from the ureters; this unpleasant sensation he attributes to the stimulus of inanition.

urine, its influence on the irritability of the bladder will be varied, according to its degree of strength or acrimony. Such are sometimes its stimulating properties, that the bladder expels it as fast as it collects. Its quantity is influenced by the suddenness of its accumulation. Of all the animal fluids, the urine is most variable in its physical and chemical qualities. Not only its materials appear mixed in different proportions, but there are frequent differences in respect to their number. Ordinarily there are three kinds of urine, varying in physical and chemical qualities, according to the time it has been retained.

1. The urine of *drink* is rendered almost immediately after a great quantity of liquid has been received into the stomach; it is but slightly animalized, its odor is feeble, its color lighter than straw. It is almost entirely aqueous, and possesses sometimes a part of the qualities of the drink that has been taken. Certain medicinal substances, called diuretics, have a specific action on the kidneys in augmenting the secretion. Charged with a very small quantity of the salts and other materials constituting the true urine, that of drink is an unfaithful representation of this liquid, and therefore is not selected by the chemist for analysis. Experiments thus made, serve to determine wherein the urine of drink differs from that which is secreted during the course of a typhous fever. In relation to their physical properties, their difference is very small.

2. The urine of *chyle* possesses much more of the constituent principles than the above,—its odor and color are more strongly marked:—the kidneys have re-

ceived blood charged with chyle, and elaborate a more perfect urine, partaking very often of the nature of alimentary substances.

3. That of the *blood*, possesses all the characteristic principles of urine, whether physical or chemical, in the highest degree, and is therefore generally selected by chemists for analysis.

Such are the appearances of urine in a state of health; but this excretion is singularly modified by disease; and the changes to which it is liable, have attracted the attention of physicians in all ages, because they serve in some measure to indicate the state of the patient, and the progress of the disease under which he labors. "The following," says Thomson, "are the most remarkable of these changes that have been observed.

"1. In *inflammatory* diseases the urine is of a red color, and peculiarly acrid; it deposits no sediment on standing, but with corrosive sublimate it yields a copious precipitate.

"2. During *jaundice* the urine has an orange-yellow color, and communicates the same tint to linen. Muriatic acid renders this urine green, and thus detects the presence of a little bile.

"3. About the end of *inflammatory* diseases, the urine becomes abundant, and deposits a copious pink colored sediment, composed of rosacic acid, a little phosphate of lime, and uric acid.

"4. During *hysterical* paroxysms, the urine usually flows abundantly. It is limpid and colorless, containing much salt, but scarcely any urea, or gelatine.

"5. Mr. Berthollet observed, that the urine of gouty persons, contains usually much less phos-

phoric acid than healthy urine. But during a gouty paroxysm, it contains much more phosphoric acid than usual; though not more than constantly exists in healthy urine.

"6. In general *dropsy*, the urine is loaded with albumen, and becomes milky, or even coagulates when heated, or at least when acids are mixed with it. In dropsy from diseased liver, no albumen is present; the urine is scanty, high colored, and deposits the pink colored sediment. In certain cases, females have been observed to pass urine which had the appearance of milk, and which, on examination, proved to differ from common urine, in containing a notable proportion of the curdy part of milk.

"7. In *dyspepsia*, the urine always yields a copious precipitate with tan, and putrefies rapidly.

"8. The urine of *rickety* patients, is said to be loaded with phosphate of lime, or, according to others, with oxalate of lime.

"9. Mr. Rose has ascertained that in chronic hepatitis, the urine is destitute of urea. This fact is confirmed by the experiments of Dr. Henry.

"10. In *diabetes* the urine is sweet-tasted, and often loaded with saccharine matter. Twenty-nine ounces of sugar, according to Cruikshank, have been voided in the urine of a diabetic patient, in a single day."

(To be continued.)

II.

Effects of Spirits of Turpentine in a Case of Intermittent.

By M. F. COLBY, M.D.

HEMAN BANGS, of the town of Hammond, St. Lawrence County,

State of New-York, was attacked with intermittent about the first of March last. The paroxysms were interrupted by occasional emetics, cinchona, sulphate of quinine, &c. In consequence of having suffered several times from a recurrence of the fits, he was induced to visit Derby, (Vt.) anticipating benefit from change of climate. I was called to him about the 1st of July; found him laboring under a severe tertian; much debilitated; countenance indicating extreme functional derangement of the liver. Mild mercurial laxatives evidently increased the severity of the paroxysms; the disease, however, appeared to yield to free doses of cinchona, with Fowler's solution, &c. No improvement in the general health; appetite impaired, with occasional headach.

Aug. 1st. Paroxysms returned, with increased severity. On the 5th, gave him two-thirds of a large table-spoonful of spirits of turpentine, in molasses, in the midst of the cold stage. Effects: an immediate suspension of the cold stage; the patient called for and drank freely of cold water; in about five minutes, vomited; the hot and sweating stages not distinctly marked, but complained of pain and headach through the day. I directed the same quantity of turpentine to be given *immediately*, on the *accession* of the next cold stage. The patient refused to take it, and had severe paroxysms on the 7th and 9th. On the 11th, was prevailed on to take the turpentine on the accession of chills. Effects: chills instantly suspended; no nausea or unpleasant symptom followed. On the 13th, 15th, 17th, and 19th, the turpentine was administered

with the same beneficial effects. From this time his general health improved rapidly. I saw him the last of October in perfect health.

I was induced to make trial of the turpentine in this case from having observed,

1st. That functional derangement of the liver is one of the first and immediate effects of the disease.

2d. That structural derangement of the liver and spleen exists to a greater or less degree in all protracted cases.

3d. That the usual tonic remedies, though they arrest the morbid phenomena constituting the essential character of the disease, have a direct tendency to increase structural derangement of the viscera,—hence the opinion, that it injures the constitution to break the fits, by tonics, is not ill founded.

4th. That turpentine possesses the property not only of arousing the system from a state of torpor, but also of suppressing inordinate action, particularly of the mucous tissues.

In typhus I have used turpentine freely for three years past. After bleeding, if any symptoms of gastro-enteritis exist, I use it freely, in doses of one tea-spoonful, combined with calomel and castor oil, and repeat daily till all tenderness is removed from the abdomen.

III.

Of Laborious Labor.—From Lectures delivered at Guy's Hospital,

By Dr. JAMES BLUNDELL.

ALTHOUGH, gentlemen, in all cases, the use of instruments con-

trived for the extraction of the foetus, is to be looked on as a great evil, yet in labors of difficulty or danger, it sometimes happens; that the use of these instruments occasions a smaller evil than that which would arise from the commission of the labor to the unassisted efforts of nature. In these cases, and these cases only, it is, that the employment of instruments becomes justifiable, and to the consideration of these cases, the laborious labors, as they are denominated, we will now proceed; commencing with the consideration of the more important accidents to which, in this variety of it, delivery becomes obnoxious, whether during parturition or afterwards. And first, let us give our attention to those accidents which occur, more especially, during the delivery.

It is not frequently that a disruption of the larger air tubes occurs in the progress of laborious parturition; yet this accident is sometimes observed, the trachea or bronchi giving way. After much exertion, the neck and face swell; from the hurrying of the circulation, an erythematous flush of the integuments is produced, and at first glance the patient appears to labor under a sudden attack of erysipelas; the flatulent nature of the swelling manifesting itself on making an examination, by the usual crepitus perceived on compressing, and lightly shampooing the skin with the tips of the fingers. Should emphysema occur, delivery is desirable. To retain the breath and force down, is likely to aggravate the disease, so that the emission of the voice may be recommended. After delivery, if I may judge from the single case brought under my no-

tice, the aperture, seldom perhaps capacious, heals spontaneously, and without inflammation the air is absorbed. The patient under my care, a stout Irishwoman, disposed to clamor and to make violent efforts, was, in a former labor, attacked with the laceration, recovering on both occasions without a single bad symptom. The second time, she was delivered by the help of the long forceps.

In labors, protracted and violent, the vascular system may give way; nor is the patient always of plethoric habit. Sometimes the smaller parts of this system, sometimes the more capacious, are burst, and the blood may become extravasated into any of the three great cavities—the head, chest, or abdomen. After a most laborious labor, a young lady, suffering a very severe pain, the fœtus suddenly burst into the world; but at the same moment the blood began to gush from the lungs, and speedily the patient was suffocated. A woman, of a system by no means plethoric, after uterine hæmorrhage, neither very violent, nor very long continued, suddenly fell back upon the bed and expired. On inspection afterwards, the mouth of the womb was found to be dilated to the breadth of a dollar, the shoulder presenting, and the right ventricle of the heart was laid open to the extent of one or two inches, as if it had been wounded by the knife, and the pericardium contained an ounce or two of blood. For when the heart bursts, a very small bleeding seems to accompany the cessation of its action. To a very sensible friend, Mr. Bryant, of Kennington, I am indebted for this case.

Though not a certain preventive of vascular or cardiac laceration, the abstraction of blood from the arm seems to be the remedy more especially deserving trial. It is not always with repletion, nor under the more violent efforts of the uterus, that these disruptions occur; nor is there, in general, a previous warning; they are, however, to be apprehended, more especially if the system is full of blood, and if the uterine efforts are violent. Delivery seems to be clearly indicated, when these ruptures are reasonably apprehended; and though the abstraction of blood from the arm is by no means a certain security against laceration of the heart or vessels; yet, in prudence, this remedy ought to be tried. Voluntary urging, in these cases, is undesirable. The calmer the patient is, the better.

In the commotion of labor, sometimes the genitals give way in the upper part of the pelvis, the body of the womb yielding occasionally, and still more frequently the neck or vagina. Longitudinal lacerations are not common; in general, the rending is transverse, and lies opposite the promontory of the sacrum, or the symphysis pubis, the regions most obnoxious to laceration. Frequently, the rent is carried completely through the peritoneum, so that the hand might be carried up among the intestines; occasionally, the rent penetrates to the peritoneum without passing through it, the inner textures, vaginal or uterine, alone giving way; nor am I fully convinced that these lacerations, when seated in the upper part, are much less dangerous than the preceding. The fœtus may be expelled by the

same effort which lacerates the uterus, as in one case which fell under my own notice ; or the genitals yielding, the head may remain impacted in the pelvis, the body alone, of the child, lying forth through the opening into the peritoneal sac ; or, lastly, and most frequently, the womb or vagina yielding, the whole fœtus, with its secundines, may pass through the laceration, so as to lodge among the intestines.

Variously, and not always with just blame of the obstetric attendants, these lacerations of the genitals may be produced ; sometimes by rude attempts to introduce the hand, sometimes by the ill-directed introduction of the forceps or the lever, sometimes by the rash and rapid abstraction of the head, and sometimes by the long continued and violent, but unavailing, efforts of the womb to expel the fœtus, the uterus tearing under its own exertions. The symptoms and treatment of lacerations after they have occurred, we will consider at large on some future occasion, confining our observations, at present, to the prevention of this tremendous accident. Lacerations may be sudden, no premonitory symptom preceding, so that we have not always an opportunity of taking precautionary measures ; yet, now and then, the accident is foreshown more or less distinctly, by the violence of the uterine efforts ; and, above all, by unusual, and, as it were, unintelligible, pains. "The cramp," the patient exclaims, and suddenly the womb gives way, or stabbings or cuttings, unusually severe, are felt for some minutes, before the laceration in the region of the rent. In a scientific midwifery, violence has no place ;

you, therefore, I trust, will never lacerate the genitals, by the clumsy use of the lever or the forceps, by a hurried abstraction of the head, or by coarse and forcible attempts to introduce the hand into the womb or vagina. Sometimes, however, without this manual violence, the womb yields spontaneously, nor do I know any certain mode of preventing this, except by the abstraction. It is much to be regretted, that (as before observed) we possess, at present, no certain and timely indication, by which the accident may be foreknown. A rending sensation, and sudden collapse of the strength, with a small discharge from the womb, are sometimes the first manifestations by which the laceration is indicated, so that there is no room for a preventive practice ; nor may it be amiss to remark here, that when the disruption has occurred, the case, though dangerous, is not hopeless ; and that the abstraction of the child by turning, may be looked on as a principal remedy.

Among the accidents of laborious labor, laceration of the perineum, together with the adjacent parts, deserves especial commemoration. More rarely the head has forced its way through the lower extremity of the rectum and anus, the vagina yielding posteriorly. In some few cases, the perineum dilating greatly under the pressure of the cranium, an aperture has been forced between the genital fissure and the anus, the child leaving the pelvis and passing through the opening. In most instances, however, the perineum gives way, in consequence of the fissure enlarging towards the anus ; sometimes di-

rectly and extensively, so that the sphincter ani is torn, the anus and genitals of consequence forming but one aperture. Now and then, however, the perineum yields obliquely, the rent being carried down on one side of the rectum, so that the gut escapes; and very frequently, whether direct or oblique, the laceration is of small extent only, perhaps not exceeding half an inch or an inch. When the rents are of small extent they occasion but little inconvenience; when the intestine is involved in the injury, the retentive powers which restrain the feces, lost for a longer or shorter period, are perhaps never thoroughly restored. When the laceration is carried downward obliquely to the side of the anus, the power of restraining the contents of the bowels remains.

Rude attempts to introduce the hand—the rapid abstraction of the head by embryo-spastic instruments—or the sudden eruption of the cranium from the pelvis, under the natural efforts, at a time when the perineum is unprotected by the accoucheur: these are the principal causes of laceration; and now and then, perhaps, the rent may be occasioned by the descent of the foetal shoulders, when broad. If many children have been born before, lacerations are less likely to occur, as a rigidity of the part met with in first labors, especially if women are advanced towards middle life, seems to be a principal cause disposing to this accident. Bleeding from the arm—fomentations of the genitals—protective support of the perineum, with resistance to the further progress of the head, are the best preventives of the accident; and, though often urged

to do so by friends about her, the patient should not force voluntarily, when the head is at the point of emersion, and the perineum is in danger of giving way. Dangerous distension is easily ascertained by feeling the part. As, however, the whole subject will be considered more largely hereafter, I forbear, at present, from further remark.

In laborious labors, the urethra is liable to be more or less obstructed, and large accumulations of urine in the bladder may arise in consequence. Inflammation of the cervix vesicæ, swelling there, perhaps spasmodic constriction of the upper part of the urethra, and the compression of this yielding duct between the head of the foetus and the front of the pelvis, are the most probable causes of these obstructions. The less the patient drinks, and the more she perspires, in these cases, the better. When the bladder is full, I have often perceived it through the abdominal coverings, forming a large tumor, to be felt distinctly in the front of the abdomen lying over the uterus. By cautiously bearing the foetal head from the front of the pelvis, and passing along the urethra a catheter flattened and small, the urine may now and then be drawn off; but in laborious labors, when there is real difficulty, the catheter sometimes cannot be passed up. If the urine cannot be withdrawn, the delivery must be accomplished artificially, provided the accumulation is becoming so large as to endanger the bladder, and, in general, retention of the urine indicates much pressure, and the risk of slough, and is an argument for delivery.

(To be continued.)

FOREIGN OBITUARY.

E. G. Georget, born on the 9th of April, 1795, died on the 15th of June, 1828. Besides the celebrated works on "Diseases of the Mind," and on the "Physiology of the Nervous System," he wrote for the *Dictionnaire de Médecine* all the articles relative to the subject of mental derangement, and on affection of the nerves.

Dr. Bremser, of Vienna, the author of one of the most elaborate works on intestinal worms, died on the 21st of August, 1827.

IV.

HOSPITAL REPORT.

Fracture of the Knee-joint.

A YOUNG man, 17 years old, driving a very heavy load of wood, slipped on the ice and fell under the wheels of his cart. One wheel passed over both knees, tearing the flesh from them to an extent about eight inches long and four broad in each. The bones of the right knee were crushed. The patient was soon after brought to the Hospital in a state of insensibility; his skin cold, pulse quick and weak. The wounds above named did not bleed; but a very small aperture behind the right knee bled copiously, and the bleeding was checked with difficulty. On examination, it appeared that the condyles of the os femoris were broken across.

As it was plain that the limb could not be preserved, the principal question as to the treatment of this case was, Shall the limb be amputated on the spot, or shall some delay be made?

In favor of proceeding to immediate amputation, it was thought, that the patient would be hourly losing strength in consequence of the severe constitutional sympathy with the injury; and that the flow of blood, at present restrained, might return, and suddenly exhaust his remaining strength.

On the other hand, it was suggest-

ed, that if the operation was performed at once, the patient, already excessively feeble, might die from loss of blood in the operation; that if there was sufficient vitality to bear an operation, there was enough to bear the action of cordials, by which the patient might be supported and roused.

These, and other considerations of inferior magnitude, led to the decision to wait twenty-four hours, and if then the patient had revived, to operate.

Cordials were therefore carefully administered; external warmth was supplied by applications of hot spirit; the bleeding wound was plugged and secured by bandage, and a tourniquet fixed above the bleeding part, to be in readiness to act if necessary; and the patient was ordered to take 10 drops of Tinct. of Opium, with 30 of spirits of Nitrous Ether every two hours.

In the night he groaned much. On the following morning, the warmth of his skin was restored; the pulse was more steady and strong, and the patient had a sufficient return of intellect to hear the proposal for amputation, and to consent to it if thought indispensable.

He was immediately conveyed to the operating theatre; and the femoral artery being compressed in the groin by Dr. Lewis, the circular amputation by triple incision was performed by Dr. Warren, assisted by Dr. Otis. Little blood was lost. No bad symptoms followed, and the patient is rapidly recovering.

In the course of last summer, a similar case occurred; with the exception that the patient's strength did not rise on the second day. A consultation pronounced that amputation was not then proper, and on the night following the patient died.

A case of this nature must excite great anxiety in the mind of the surgeon. The patient's life hangs on a thread; and on his judgment it depends whether this thread is snapped or preserved.

BOSTON, TUESDAY, DEC. 23, 1928.

BOSTON MEDICAL DISPENSARY
REPORTS.

For the Month of November, 1928.

THE weather was very variable. Rain was frequent; the cold was quite severe about the middle of the month; and a little snow fell on the 12th and 19th days.

NORTHERN DISTRICT.

Whole number of cases, 54. Of

Abortus	-	-	-	1
Arthrosia acuta	-	-	-	4
Catarrhus communis	-	-	-	3
Causis	-	-	-	1
Cephalæa gravans	-	-	-	1
Colica	-	-	-	1
Contusio	-	-	-	3
Coprostasis obstipata	-	-	-	1
Diarrhœa	-	-	-	2
Dysenteria acuta	-	-	-	1
Enteritis	-	-	-	1
Erysipelas	-	-	-	1
Hæmorrhagia uterina	-	-	-	1
Ophthalmia taraxis	-	-	-	5
Paramenia obstructio	-	-	-	2
do. profusa	-	-	-	2
do. suppressio	-	-	-	1
Parotitis	-	-	-	4
Parturitio	-	-	-	3
Phlegmone communis	-	-	-	1
Pleuritis	-	-	-	1
Porrigio	-	-	-	2
Scabies	-	-	-	1
Syncope	-	-	-	1
Synochus	-	-	-	6
Varicella	-	-	-	4

J. W. McKean.

EASTERN DISTRICT.

The number of cases was 7: of these, 4 were puerperal; 57—53 cases requiring medical or surgical treatment.

Arthrosia acuta	-	-	-	1
do. chronica	-	-	-	2
Bex convulsiva	-	-	-	4
Bronchitis	-	-	-	2
Bubo simplex	-	-	-	1

Catarrhus	-	-	-	3
Cholera	-	-	-	1
Contusio	-	-	-	2
Diarrhœa	-	-	-	3
Dysenteria	-	-	-	1
Dyspepsia	-	-	-	2
Gastritis	-	-	-	1
Hæmoptysis	-	-	-	1
Hemicrania	-	-	-	1
Herpes zoster	-	-	-	1
Laryngitis	-	-	-	1
Leucorrhœa	-	-	-	1
Paristhmitis tonsillaris	-	-	-	1
Paronychia	-	-	-	1
Peritonitis	-	-	-	1
Phthisis	-	-	-	2
Phlegmone communis	-	-	-	2
Pleuritis	-	-	-	2
Pneumonitis	-	-	-	3
Porrigio favosa	-	-	-	1
do. galeata	-	-	-	1
Ptyalismus	-	-	-	1
Stremma	-	-	-	1
Synochus	-	-	-	6
Ulcus	-	-	-	2
Vulnus	-	-	-	1

The patients under puberty were 0.34; adult females furnished .38 of the cases of acute disease. .42 of the medical cases were of bronchial and pulmonary disease; .21 were disorders of the digestive organs.

J. G. STEVENSON.

MIDDLE DISTRICT.

Whole number of cases, 11. Of

Pneumonitis mitis	-	-	-	3
Puerperal	-	-	-	1
Fever	-	-	-	2
Colic	-	-	-	1
Ophthalmia	-	-	-	2
Paristhmitis	-	-	-	1
Arthrosia	-	-	-	1

E. G. DAVIS.

WESTERN DISTRICT.

Whole number of cases, 32. Of

Abortus	-	-	-	1
Arthrosia	-	-	-	2
Asthma	-	-	-	1
Diarrhœa	-	-	-	2
Enecia	-	-	-	4

Emesis - - - -	1
Erysipelas - - -	1
Emp. pneumon. vera -	1
do. notha - - -	5
Emp. paristhmitis -	1
Hernia inguinalis -	1
Hysteria - - - -	1
Hydarthrus - - -	1
Ophthalmia - - -	1
Parturitio - - -	2
Paramen. diff. - -	1
Paralysis - - - -	1
Porrigo - - - -	1
Proctica marisca -	1
Prolapsus ani - - -	1
Scarlatina - - -	1
Ulcus - - - -	1

J. H. LANE.

SOUTHERN DISTRICT.

Whole number of cases, 68. Of

Arthrosia acuta - -	1
do. chronica - - -	2
do. hydarth. strumatos.	1
Bex humida - - - -	5
do. sicca - - - -	3
Catagma fractura denudata	1
Cephalitodes ebriosus -	1
Coprostasis coacta -	1
Diarrhœa biliosa - -	1
do. serosa - - -	1
Dysenteria simplex -	1
Ecphylis herpes zoster -	1
Ecphyesis ecthyma luridum	3
do. do. vulgare -	1
Emphylysis varicella lentiform.	1
Empresma bronchlemmitis	1
Enecia cauma pleuriticum	1
do. synochus - - -	5
do. do. sudatorius	1
Epanetus mitis - - -	5
Erythema gangrænosum	1
Hæmorrhagia hæmaturia	1
Helminthia alvi ascar. lumbri,	3
do. podicis ascarid.	
do. vermic. - - -	1
Hernia umbilicalis -	1
Lepidosis psoriasis diffus.	1
Limosis dyspepsia sedentaria	2
Lues syphilodes - - -	1
Odontio dentitionis lactentium	1
Paramenia superflua crebra	1
Parturitio - - - -	7

Phlegmone communis -	1
Struma mesenterica -	2
do. vulgaris - - -	6
Syspasia hysteria atonica	1
Tressis vulnus penetrans	1

Females, over fifteen, 32; under fifteen, 23. Males, over fifteen, 6; under fifteen, 7.

Chickenpox has occurred very frequently the last month; the case reported, was the only one requiring medical treatment. The fevers have been mild, and the diseases of the month generally light, terminating favorably, with the exception of the gangrenous inflammation, which was accompanied by delirium tremens and terminated in death. The cases of E. C. Pleuritis and E. S. Sudatori. were particularly severe for a few days, but had a very fortunate termination, especially the latter case, for in ten hours after the sweating stage commenced, the patient was in fact quite restored, and required no further medical attendance.

CHARLES T. HILDRETH.

Communications have been received from Drs. Trowbridge, Davis, Spaulding and Storer.

A short time since we published an interesting paper on Dengue, by that distinguished physician, Dr. Osgood, of Havana. A mistake was made in the title, in which his name was printed *David*, instead of Daniel Osgood, M.D.

WEEKLY REPORT OF DEATHS IN BOSTON,

Ending Dec. 11, at noon.

Dec. 4. Austin Fennly,	51 yrs.
6. Mary Quinn,	47
Charles R. Cowdin,	19 mo.
Jane Flagg,	90 yrs.
Mary Stuart,	22
Amity Goodwin,	64
7. Daniel Warner,	21
Ann Farrell,	38
Mary Ferriter,	90
8. Joseph Stanford,	29
Ann M. Blois,	27

Mary B. Lawrence,	5
9. Samuel Bacon,	26
Mary H. Murphy,	7
George S. S. Clark,	7
John Tucker,	72
11. Sarah Odiorne,	27
Jerush Cushing,	29
Lucy Vassel,	54
George B. Miller,	3 w.

Accidental, 2—burn, 1—brain fever, 1—consumption, 2—croup, 1—canker, 1—dropsy, 1—inflammation in the bowels, 1—inflammation in the lungs, 1—intemperance, 1—lung fever, 3—old age, 3—paralysis, 1—unknown, 1. Males, 8—females, 12. Stillborn, 2. Total, 22.

kept by Messrs. Wm. B. & Henry White.) His stock of Drugs and Medicines is complete and genuine. Physicians and others are assured that their orders, prescriptions, &c. will meet with prompt and strict personal attention.

The old friends of this establishment are requested to continue their patronage.

EUROPEAN LEECHES.

CHARLES WHITE, No. 269 Washington St., Corner of Winter St., has received a supply of GERMAN and PORTUGUESE LEECHES.

ADVERTISEMENTS.

SURGICAL INSTRUMENTS.

DAVID & JOHN HENSHAW & Co. No. 33, India Street, near the head of Central Wharf, have for sale a very extensive assortment of Surgical Instruments. Gentlemen wishing to purchase will find it to their advantage to call and examine them. Oct. 14. 6mo.

ABERNETHY'S LECTURES.

THIS day published by Benjamin Perkins & Co. Lectures on *Anatomy, Surgery, and Pathology*, including observations on the nature and treatment of *Local Diseases*,—delivered at St. Bartholomew's Hospital, by JOHN ABERNETHY F. R. S. 6w. Boston, Sept. 22, 1828.

BENJAMIN PERKINS & CO. have in the press, and will shortly publish, "A Manual for the use of the *Stethoscope*, being a Treatise on the different Methods of investigating the Diseases of the Chest. Translated from the French of M. COLLIN, by W. N. RYLAND, with Notes and an Introduction by a Fellow of the Massachusetts Medical Society. Oct. 23, 1828. Nov. 4—6w.

NATHAN JARVIS,

Druggist and Apothecary,

HAS taken the Apothecaries' Hall, No. 188, Washington Street (lately

PRIZE DISSERTATION

On the Effects of Spirituous Liquors.

AT the Annual Meeting of the Massachusetts Medical Society in 1827, the following resolution was adopted:—"Resolved, That this Society will use the skill of its members in ascertaining the best mode of preventing and curing the habit of intemperance, and that for this purpose a premium of FIFTY DOLLARS shall be offered for the best Dissertation on the subject; which after being approved by the Counsellors shall be read at the next annual meeting of the Society, and afterwards printed; and that the authors be requested to point out the circumstances in which the abandonment of the habitual use of stimulating drinks is dangerous; and also to investigate the effect of the use of wine and ardent spirits on the different organs and textures of the human body."

In consequence of this resolution two dissertations were presented; but not being sent within the time specified, they could not be examined.

At the Annual Meeting of the Society in 1828, it was voted to renew the offer of the premium on the same conditions, and the undersigned were chosen to receive and examine the dissertations.

The dissertations presented for the premiums may be left at the office of Mr. John Cotton, Bookseller, Boston, or sent to the Chairman of the Committee; on or before the 15th day of April, 1829.

JOHN C. WARREN, }
ZABDIEL B. ADAMS, } Committee.
JOHN WARE, }

Published weekly, by JOHN COTTON, at 184, Washington St. corner of Franklin St., to whom all communications must be addressed, *postpaid*.—Price three dollars per annum, if paid in advance, three dollars and a half if not paid within three months, and four dollars if not paid within the year. Thege asod for this is the same as for other newspapers.